



United States  
Department of  
Agriculture

Forest  
Service

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Reply to: 3400 Forest Pest Management

Date: March 8, 1984

Subject: Big-Cone Douglas-Fir Outplanting in Fomes annosus  
Center, Palomar Ranger District, Cleveland N.F. - Update

To: Files

On March 6, 1984, Gene Blankenbaker, Palomar Ranger District, John Pierce, FPM, and I visited the site where big-cone Douglas-fir had been planted in 1979 in a Fomes annosus center. Gene had previously located the area so he was able to easily take us to it. The labelled metal posts were still in place on each strip.

Seedlings that had survived and could be located were counted.

Strip #1	31 seedlings
Strip #2	16 seedlings
Strip #3	17 seedlings

No recently dead seedlings were observed. The live seedlings ranged in height from 4 to 10 inches. Many of the seedlings had the Vexar tubing in place, although it was in various stages of deterioration. Mortality of the local conifers had not occurred recently and there was no evidence of an active annosus root disease center.

Locating seedlings was difficult for several reasons. The lack of individual tree markers and the less than rigid spacing were key factors. Regeneration of the local big-cone Douglas-firs is also adding a confusing factor. Two factors appear to be the primary causes of seedling loss. Pocket gopher activity was common in the area. These animals likely killed a number of seedlings in the first few years. The amount of brush and grass is now a major competition factor. Without some vegetation control and release, the surviving seedlings will be under considerable stress and will be limited in growth.

It is difficult to see how the results from this project can be used to evaluate F. annosus as a mortality factor of big-cone Douglas-fir. The loss of so many seedlings to factors other than F. annosus eliminates any statistical evaluation. It may be possible to follow surviving seedlings to see if any become infected. This would only be a test of positive association, and no negative response could be made. However, without some type of release and tree marking, additional seedlings will be lost and those that survive will be growing so slowly that many decades may pass before infection occurs, if at all.

*Gregg A. Denitto*

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